



muuun smart smoke detector battles climate change through fire prevention

It takes most people around two minutes to do 40 burpees. You can also write a decent-length text in two minutes or make a cup of coffee. But in the space of that time, those tiny two minutes, someone, somewhere in the world dies of carbon monoxide poisoning. Every two minutes. All day long, every day of the year. The worst part of it is, an overwhelming number of those deaths are 100% preventable. The same holds true for the number of household pets that perish from unchecked carbon monoxide problems, the number of fires that start because of faulty smoke alarms, and the damage done to our environment as a result of the lack of education and preparedness on both subjects.

The Dangers of Carbon Monoxide and Low-Quality Smoke Detectors

Carbon monoxide is very literally a silent killer. It cannot be seen nor smelled, and its initial effects are non-irritating, meaning a person could be exposed to it for some time before noticing a change. Even more dangerous is the fact that the common symptoms, which include weakness, headaches, dizziness, and confusion, often cause people to want to lay down or go to sleep, during which time they often succumb to the poisoning completely. In Europe, carbon monoxide poisoning has a higher mortality rate than HIV/AIDS, killing 2.24 people per 100,000, compared to 2.0 for HIV/AIDS. What's even scarier is that most causes of carbon monoxide are also quiet things; like faulty furnaces, heaters, wood-burning stoves, gasoline-powered tools, and exhaust from cars and trucks.

Most smoke detectors are built to also measure carbon monoxide levels in homes and businesses, but they have numerous dangerous flaws. The first of which is that most people aren't regularly testing and checking to make sure the smoke detectors are working properly.

When a smoke detector is powered only by batteries, it has a shelf life that is eventually going to run out. It might beep insistently when that battery is on the verge of dying, but when it's dead, it's dead, and the warnings will stop. So what happens when the unit dies while you are at work, at school, out with friends, or on vacation? Not many of us have the savvy to go straight to the smoke detectors when we get home from work to ensure they are still working!

It's a worldwide problem. A survey of homes in the United Kingdom found that more than [30% of smoke alarms](#) have their batteries either dead or removed.

It's just as big a problem in the United States where the National Fire Protection Association reports that while 94% of American homes have a smoke alarm on the property, more than 33% of them are non-functional due to dead or missing batteries. One of the biggest flaws is that the large majority of smoke detectors are old-fashioned. They are cheaply made and home building companies often will take the lowest bid for products that meet the minimum standard of safety.

The biggest shortcoming beyond the lack of accountability about the power supply of these units is that they are only warning you if you are at home, close enough to hear the warning, and have the capacity to understand what the warning beep means.

Unfortunately, many tragedies occur every year when senior citizens, people who suffer from a disability, or children are left home alone and either cannot hear the smoke or fire alarm or don't know how to respond to it. This is equally true for household pets left alone for any stretch of time. A 12-year-old who comes home after school on a bus and immediately puts their headphones on to play video games won't hear the tell-tale signs of trouble that there's a problem with the household heater and they need to get out.

Imagine an elderly parent or grandparent who is living with their children. Picture them taking an afternoon nap home alone with a heating pad that malfunctions. They are asleep and don't hear the smoke detector registering the fire until it's blazing. This is a population segment that struggles to move quickly and make sharp decisions, and the lack of a reliable, modern smoke detector is putting them in a potentially life-threatening situation. It doesn't take long to imagine what happens to pets in situations like this. If they are kept inside – either free to roam or in kennels and cages, they are trapped and no one knows they are in danger. People who are truly passionate about their pets consider them members of the family, and while their deaths come in time, having them taken away tragically is heart-breaking and can cause tremendous guilt for not caring for them properly.

Even when the result is not a tragic accidental death, the fact that smoke alarms are not smart technology leads to incredible, unnecessary damage to smoke, fire, and carbon monoxide getting out of control very quickly. A fire can destroy an entire house in just three minutes. If you've ever seen something catch fire, you have just a small taste of how quickly fire spreads in the right (or wrong) circumstances. If you haven't, and you own a barbecue grill or fire pit, try a short, safe experiment. Get the fire going and use tongs or other fire-safe tools to drop a single paper towel or napkin to the side of the fire. It might take a few seconds for the flames to find it, but once they do, the entire thing is engulfed in the blink of an eye.

In real life, it can take a smoke detector a good 30 seconds to detect the smoke from a fire inside a building.

Waking up to that sound can cause sheer panic in a person and cost them another 30 seconds waking up, understanding what the sound means, and starting to move to figure out if it's real or a false alarm. Within those first 60 seconds, the temperature in a room can reach 200 degrees. People experience first-degree burns at 118 degrees and human skin starts to break down at 162 degrees. Those first moments are massively critical to escaping a fire and saving your family. And antiquated smoke alarms simply aren't cutting it. By the time they alert you to the dangers, you find a house too hot to access easy escape routes and rapidly filling with smoke – which causes confusion, makes it hard to see, and is responsible for an overwhelming number of deaths due to lack of oxygen to breathe.

The muuun Solution

[muuun](#) smoke alarms don't rely on old-fashioned beeps and disorienting sirens. They alert you in the fastest, most reliable possible; through an app tied to your smartphone or any other Internet-connected device you enable. muuun smoke detectors can fit to any interior surface and were developed for the very specific purposes of saving lives and homes from fire and carbon monoxide poisoning. muuun is powered by batteries like other smoke detectors, but those batteries are monitored via a mobile app, letting you know their exact charge level at all times so you can always know how close you are to needing to change them. There are no wires with a muuun smoke detector, meaning bad wiring leading to an inferno is a thing of the past. While homes are built far better than they were even 20 years ago, there are still nearly 30,000 electrical fires in the US every year, which contribute to more than 300 deaths and more than \$1.1 billion in property damage. muuun is powered by SIM cards using narrow-band Internet of Things (NBloT) technology. This means it conserves energy better, has a longer power life, and is a more effective use of technology.

This design isn't just innovative, it's [already been lauded](#), winning the prestigious [Red Dot](#) and iF Design Awards.

The Environmental Choice

When the world's environmental picture is getting shakier by the day, every little bit of energy conservation counts. muuun is a firm believer in this concept and has made its smoke detection devices some of those ergonomically impressive in the world.

The muuun units use as much as 150 times less energy than standard wired smoke detectors, and consume about 4.5 times less data, which reflects its heat, energy, and carbon outputs positively. When IoT solutions are put in place of wired ones, climate change can be [slowed down significantly](#).

With fires so often causing injury, death, and destruction, their effect on the environment is not something we usually think about. But we should. The burning of the average-sized house can cause significant damage to the local environment surrounding it. The plume of smoke contaminates the air and can be damaging to at-risk populations who suffer from lung and respiration struggles. The runoff water from the fire department gets polluted with ash and burned pieces of home-building materials and can send those things into the local water supply. Everything left over turns into litter if not properly disposed of, litter that won't break down anytime soon and can foul up plant and animal life in the surrounding area.

How important is the environment to people in Western countries? Enormous. A poll in 2020 by the European Commission showed 94% of EU residents value environmental protection as very important. Fires contribute to air pollution, water pollution, littering, and global warming all at once. muuun's increase in technological efficiency via smart smoke detectors is just one way the company is dedicated to making the environment a better place. Fewer fires means less of a need to rebuild structures, which means fewer trees are chopped down and fewer plants and animals have their homes uprooted for new construction.

muuun's commitment to the environment goes beyond that. Muuun sources all of its packaging from paper merchant Antalis, which offers customers the unique opportunity to compensate for the carbon dioxide emissions that are expended during the production of the paper they are purchasing.

This not only reduces both companies' carbon footprint, but also allows muuun to purchase carbon neutral paper by paying an additional fee, which is then donated directly to the [Plan Vivo Foundation](#) in Africa.

Plan Vivo is an organic framework that provides guidance to rural farmers and ranchers to manage their own area's natural resources from a more sustainable point of view in order to deliver long-term results from a climate, livelihood, and environmental point of view. Farmers are paid to plant and tend to trees, and are the sole beneficiaries of the fruits and nuts those trees provide, which they are free to eat or sell for extra income. Most of the farmers use the extra income to make improvements on their own homesteads, making it a true circular vision of success.



Conclusion

Plenty of people can't tell one smoke detector from another when they walk through a building or do a home inspection before purchasing their next piece of property. But the difference between an old-fashioned smoke alarm and the innovative detectors that have been patented by muuun is life-changing. With the latest in smart smoke detector technology, you greatly enhance your chances of keeping your home, your family, your pets, and your planet safe from the dangers of smoke, fire, and carbon monoxide.

Are you ready to land muuun and save lives in your country? Contact us for partnerships here: <https://bit.ly/3CIJCOQ>

Find more about muuun here: <https://muuun.com>